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*Admitted only in Maryland *Admitted only in Virginia •Practice Limited to Federal Agencies

December 21, 2006

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Art Unit 1615

Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450

Attn: Mail Stop Amendment

Re: U.S. Utility Patent Appl. No. 10/550,518; § 371 Date: September 23, 2005

(U.S. Nat'l Phase of Int'l Appl. No. PCT/EP2004/003165; I.A. Date: March 25, 2004)

For:

Packaging of Immunostimulatory Oligonucleotides Into Virus-Like

Particles: Method of Preparation and Use

Inventors: Martin F. BACHMANN *et al.*Our Ref: 1700.0630000/BJD/WBC

Sir:

Transmitted herewith for appropriate action are the following documents:

- 1. Information Disclosure Statement Under 37 C.F.R. § 1.97(b);
- 2. PTO-1449 (9 pages) citing seventy-two (72) documents (AA1-AF3 and AL1-AO9);
- 3. Copy of forty-four (44) cited documents (AL1-AP1; AL2-AP2; AL3-AP3; AL4-AP4; AL5-AP5; AL6-AP6; AL7-AP7; AL8-AP8; and AL9-AO9);
- 4. Form PTO/SB/08B (11 pages) citing one hundred and two (102) documents (NPL1-NPL102);
- Copy of one hundred and two (102) cited documents (NPL1-NPL10; NPL11-NPL20; NPL21-NPL30; NPL31-NPL40; NPL41-NPL50; NPL51-NPL60; NPL61-NPL70; NPL71-NPL80; NPL81-NPL90; NPL91-NPL100; and NPL101-NPL102); and
- 6. One (1) return postcard.

It is respectfully requested that the attached postcard be stamped with the date of filing of these documents, and that it be returned to our courier.

Sterne, Kessler, Goldstein & Fox PLLC. : 1100 New York Avenue, NW: Washington, DC 20005: 202.371.2600 f 202.371.2540: www.skgf.com

Commissioner for Patents December 21, 2006 Page 2

In the event that extensions of time are necessary to prevent abandonment of this patent application, then such extensions of time are hereby petitioned.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Attorney for Applicants Registration No. 42,473

BJD/WBC:cpn Enclosures 613459_1.DOC

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Martin F. BACHMANN et al.

Appl. No.: 10/550,518

(U.S. Nat'l Phase of PCT/EP2004/003165)

§ 371 Date: September 23, 2005

For: Packaging of Immunostimulatory

Oligonucleotides Into Virus-Like Particles: Method of Preparation

and Use

Confirmation No.: 8347

Art Unit:

1615

Examiner:

To Be Assigned

Atty. Docket: 1700.0630000/BJD/WBC

Information Disclosure Statement Under 37 C.F.R. § 1.97(b)

Mail Stop Amendment

Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450

Sir:

Listed on accompanying IDS Forms, PTO-1449 and PTO/SB/08B, are documents that may be considered material to the examination of this application, in compliance with the duty of disclosure requirements of 37 C.F.R. §§ 1.56, 1.97 and 1.98.

Copies of documents AL1 to AO9 and NPL1 to NPL102 are submitted. However, in accordance with 37 C.F.R. § 1.98(a)(2), copies of U.S. patents and patent application publications, AA1 to AF3, cited on the attached IDS Form, PTO-1449, are not submitted.

Where the publication date of a listed document does not provide a month of publication, the year of publication of the listed document is sufficiently earlier than the effective U.S. filing date and any foreign priority date so that the month of publication is not in issue. Applicants have listed publication dates on the attached IDS Forms based on information presently available to the undersigned. However, the listed publication dates should not be construed as an admission that the information was actually published on the date indicated.

Applicants reserve the right to establish the patentability of the claimed invention over any of the information provided herewith, and/or to prove that this information may

- 2 - Martin F. BACHMANN *et al.* Appl. No. 10/550,518 (U.S. Nat'l Phase of PCT/EP2004/003165)

not be prior art, and/or to prove that this information may not be enabling for the teachings purportedly offered.

This statement should not be construed as a representation that a search has been made, or that information more material to the examination of the present patent application does not exist. The Examiner is specifically requested not to rely solely on the material submitted herewith.

This Information Disclosure Statement is being filed before the mailing date of a first Office Action on the merits. No statement or fee is required.

It is respectfully requested that the Examiner initial and return a copy of the enclosed IDS Forms, and indicate in the official file wrapper of this patent application that the documents have been considered.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Brian J. Del Buono

Attorney for Applicants Registration No. 42,473

Date: Dec. 21, 2006

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FORM PTO-1449

INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET	NO.
1700 0630000/R	IDM/RC

FIRST NAMED INVENTOR
Bachmann, Martin F.

FILING DATE September 23, 2005 ART UNIT 1615

10/550,518

APPLICATION NO.

Page 1 of 9

			U.S. PA	TENT DOCUMENTS			
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA1	4,722,840	02/02/1988	Valenzuela et al.			09/19/1985
	AB1	4,918,166	08/17/1990	Kingsman et al.			10/26/1987
	AC1	4,959,314	09/25/1990	Mark et al.			02/07/1985
	AD1	5,143,726	09/01/1992	Thornton et al.			11/20/1989
	AE1	5,334,394	08/02/1994	Kossovsky et al.			01/04/1993
	AF1	5,565,548	10/15/1996	Neurath et al.			03/15/1993
_	AG1	5,698,424	12/16/1997	Mastico et al.			06/26/1992
	AH1	5,780,448	07/14/1998	Davis			11/04/1996
	Al1	5,844,075	12/01/1998	Kawakami et al.			04/05/1995
	AJ1	5,871,747	02/16/1999	Gengoux-Sedlik et al.			09/13/1993
	AK1	5,874,560	02/23/1999	Kawakami et al.			04/22/1994
	•		FOREIGN	PATENT DOCUMENTS			·
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AL1	EP 0 038 154 B1	10/21/1981	Europe			Yes No
	AM1	EP 0 201 416 A1	11/12/1986	Europe			Yes No
	AN1	EP 0 385 610 B1	09/05/1990	Europe			Yes No
	AO1	EP 0 421 635 A1	04/10/1990	Europe			Yes No
	AP1	WO 92/13081 A1	08/06/1992	WIPO			Yes No
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	ATTY. DOCKET NO.	APPLICATION NO.	
FORM PTO 4440	1700.0630000/BJD/WBC	10/550,518	
FORM PTO-1449	FIRST NAMED INVENTOR		
INFORMATION DISCLOSURE STATEMENT	Bachmann, Martin F.		
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	September 23, 2005	1615	

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EXAMINER INITIAL	1	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA2	5,935,821	08/10/1999	Chatterjee et al.			11/21/1996
	AB2	5,939.598	08/17/1999	Kucherlapati et al.			07/30/1992
	AC2	5,994,523	11/30/1999	Kawakami et al.			01/16/1998
	AD2	6,025,470	02/15/2000	Valmori et al.			06/23/1997
	AE2	6,231,864 B1	05/15/2001	Birkett			02/11/1999
	AF2	6,270,778 B1	08/07/2001	Kawakami et al.			03/12/1999
	AG2	6,277,956 B1	08/21/2001	Valmori et al.			04/16/1998
	AH2	6,326,200 B1	12/04/2001	Valmori et al.			06/18/1998
	Al2	6,368,857 B1	04/09/2002	Valmori et al.			10/05/1999
	AJ2	6,380,364 B1	04/30/2002	Mueller et al.			10/06/1999
	AK2	6,384,190 B1	05/07/2002	Valmori et al.			12/14/1999
			FOREIG	N PATENT DOCUMEN	TS		
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AL2	EP 0 578 293 A1	01/12/1994	Europe			Ye N
	AM2	WO 94/15585	07/21/1994	WIPO			Ye N
	AN2	EP 0 677 111 B1	10/18/1995	Europe			Ye
	AO2	WO 95/29193 A2	11/02/1995	WIPO			Ye N
	AP2	WO 96/30523 A2	10/03/1996	WIPO			Ye N
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	ATTY. DOCKET NO. 1700.0630000/BJD/WBC	APPLICATION NO. 10/550,518
FORM PTO-1449	FIRST NAMED INVENTOR Bachmann, Martin F.	
INFORMATION DISCLOSURE STATEMENT	FILING DATE September 23, 2005	ART UNIT 1615

U.S. PATENT DOCUMENTS								
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE	
	AA3	6,537,560 B1	03/25/2003	Kawakami et al.			05/05/1998	
	AB3	2002/0064533 A1	05/30/2002	Митау			06/04/2001	
	AC3	2002/0081295 A1	06/27/2002	Schiller et al.			04/13/2001	
	AD3	2003/0050268 A1	03/13/2003	Krieg et al.			03/29/2002 ⁻	
	AE3	2003/0082804 A1	05/01/2003	Valmori et al.			02/21/2001	
	AF3	2003/0144482 A1	07/31/2003	Kawakami et al.			07/03/2001	
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	AL3	WO 98/40100 A1	09/17/1998	WIPO		002-02.00	Yes No	
	AM3	WO 98/50071 A1	11/12/1998	WIPO			Yes No	
	AN3	WO 98/49195 A1	11/05/1998	WIPO			Yes No	
	AO3	WO 98/58751 A1	12/30/1998	WIPO			Yes No	
	AP3	WO 99/28478 A1	06/10/1999	WIPO			Yes No	
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	ATTY. DOCKET NO. 1700.0630000/BJD/WBC	APPLICATION NO. 10/550,518
FORM PTO-1449	FIRST NAMED INVENTOR Bachmann, Martin F.	
INFORMATION DISCLOSURE STATEMENT	FILING DATE September 23, 2005	ART UNIT 1615

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	AL4	WO 99/40934 A1	08/19/1999	WIPO			No
	AM4	WO 99/57289 A2	11/11/1999	WIPO			Yes No
	AN4	WO 00/23955 A1	04/27/2000	WIPO			Yes No
	AO4	WO 00/32227 A2	06/08/2000	WIPO			Yes No
	AP4	WO 00/37610 A2	06/29/2000	WIPO			Yes No
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	ATTY. DOCKET NO.	APPLICATION NO.
FORM PTO-1449	1700.0630000/BJD/WBC FIRST NAMED INVENTOR	10/550,518
INFORMATION DISCLOSURE STATEMENT	Bachmann, Martin F.	
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	AL5	WO 0	0/39304 A2	07/06/2000	WIPO				Yes No
	AM5	WO 0	0/50461 A1	08/31/2000	WIPO				Yes No
	AN5	WO 0	0/62800 A2	10/26/2000	WIPO				Yes No
	AO5	wo o	1/16320 A1	03/08/2001	WIPO				Yes No
	AP5	WO 0	1/22972 A2	04/05/2001	WIPO				Yes No
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	ATTY. DOCKET NO. 1700.0630000/BJD/WBC	APPLICATION NO. 10/550,518	
FORM PTO-1449	FIRST NAMED INVENTOR Bachmann, Martin F.		
INFORMATION DISCLOSURE STATEMENT	FILING DATE September 23, 2005	ART UNIT 1615	

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EXAMINER INITIAL		DOC	UMENT BER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AL6	WO 0	1/22990 A2	04/05/2001	WIPO			Yes No
- 112	AM6	WO 0	1/56603 A1	08/09/2001	WIPO			Yes No
	AN6	wo o	1/58478 A1	08/16/2001	WIPO			Yes No
	AO6	wo o	1/77158 A1	10/18/2001	WIPO			Yes No
	AP6	WO 0	1/85208 A2	11/15/2001	WIPO			Yes No
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5001070111	ATTY. DOCKET NO. 1700.0630000/BJD/WBC	APPLICATION NO. 10/550,518
FORM PTO-1449	FIRST NAMED INVENTOR Bachmann, Martin F.	
INFORMATION DISCLOSURE STATEMENT	FILING DATE September 23, 2005	ART UNIT 1615

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	AL7	WO 01	/98333 A2	12/27/2001	WIPO				Yes No
	AM7	WO 02	/14478 A2	02/21/2002	WIPO				Yes No
	AN7	WO 02	/053141 A2	07/11/2002	WIPO				Yes No
	AO7	WO 02	/056905 A2	07/25/2002	WIPO				Yes No
	AP7	WO 02	/056907 A2	07/25/2002	WIPO				Yes No
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		Page 8 of 9
	ATTY. DOCKET NO.	APPLICATION NO.
	1700.0630000/BJD/WBC	10/550,518
FORM PTO-1449	FIRST NAMED INVENTOR	
INFORMATION DISCUSSION STATEMENT	Bachmann, Martin F.	
INFORMATION DISCLOSURE STATEMENT	FILING DATE	ART UNIT
	September 23, 2005	1615

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	AL8		3/024480 A2	03/27/2003	WIPO		000-02.02	Yes No
	AM8	WO 0:	3/024481 A2	03/27/2003	WIPO			Yes No
	AN8	WO 0:	3/031466 A2	04/17/2003	WIPO			Yes No
	AO8	WO 0:	3/039225 A2	05/15/2003	WIPO			Yes No
	AP8	WO 0:	3/040164 A2	05/15/2003	WIPO			Yes No
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	ATTY. DOCKET NO.	APPLICATION NO.
	1700.0630000/BJD/WBC	10/550,518
FORM PTO-1449	FIRST NAMED INVENTOR	
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INFORMATION DISCLOSURE STATEMENT	FILING DATE	ART UNIT
	September 23, 2005	1615

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EXAMINER INITIAL		DOCU	UMENT BER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AL9	WO 0:	3/059386 A2	07/24/2003	WIPO			Yes No
	AM9	WO 04	4/000351 A1	12/31/2003	WIPO			Yes No
	AN9	WO 04	4/007538 A2	01/22/2004	WIPO			Yes No
,	AO9	WO 20	004/016282	02/26/2004	WIPO			Yes No
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Approved for use through 07/31/2006, OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Substitute for	form 1449/P	го		Complete if Known		
				Application Number	10/550,518	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Filing Date	September 23, 2005	
				First Named Inventor	Martin F. BACHMANN	
(Use as many sheets as necessary)			s necessary)	Art Unit	1615	
				Examiner Name	To Be Assigned	
Sheet	1	of	11	Attorney Docket Number	1700.0630000/BJD/WBC	

Examiner	Cite	NON PATENT LITERATURE DOCUMENTS Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of	
Initials*	No.1	the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume number, publisher, city and/or country where published	Т
	NPL1	Adams, S.E., et al., "The expression of hybrid HIV: Ty virus-like particles in yeast," Nature 329:68-70, Nature Publishing Group (1987)	
	NPL2	Addo, M.M., et al., "Comprehensive Epitope Analysis of Human Immunodeficiency Virus Type 1 (HIV-1)-Specific T-Cell Responses Directed against the Entire Expressed HIV-1 Genome Demonstrate Broadly Directed Responses, but no Correlation to Viral Load," J. Virol. 77:2081-2092, American Society for Microbiology (2003)	
	NPL3	Allen, T.M., et al., "Induction of AIDS Virus-Specific CTL Activity in Fresh, Unstimulated Peripheral Blood Lymphocytes from Rhesus Macaques Vaccinated with a DNA Prime/Modified Vaccinia Virus Ankara Boost Regimen," J. Immunol. 164:4968-4978, The American Association of Immunologists (2000)	
	NPL4	Altschul, S.F., et al., "Basic Local Alignment Search Tool," J. Mol. Biol. 215:403-410, Academic Press Limited (1990)	
	NPL5	Altschul, S.F., et al., "Issues in searching molecular sequence databases," Nature Genet. 6:119-129, Nature Publishing Group (1994)	
	NPL6	Bachmann, M.F., and Zinkernagel, R.M., "Neutralizing Antiviral B Cell Responses," Ann. Rev. Immunol. 15:235-270, Annual Reviews Inc. (1997)	
	NPL7	Bachmann, M.F., and Zinkernagel, R., "The influence of virus structure on antibody responses and virus serotype formation," <i>Immunol. Today 17</i> :553-558, Elsevier Science Ltd. (1996)	
	NPL8	Bachmann, M.F., et al., "Induction of protective cytotoxic T cells with viral proteins," Eur. J. Immunol. 24:2228-2236, VCH Verlagsgesellschaft mbH (1994)	
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Filing Date	September 23, 2005	
				First Named Inventor	Martin F. BACHMANN	
	(Use as many sheets as necessary)			Art Unit	1615	
				Examiner Name	To Be Assigned	
Sheet	2	of	11	Attorney Docket Number	1700.0630000/BJD/WBC	

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	NPL11	Bachmann, M.F., et al., "Functional Maturation of an Anti-viral Cytotoxic T-cell Response," J. Virol. 71:5764-5768, American Society for Microbiology (1997)	
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J. B. Lavar	Considered	

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· -	NPL51	Kündig, T.M., et al., "Fibroblasts as Efficient Antigen-Presenting Cells in Lymphoid Organs," Science 268:1343-1347, American Association for the Advancement of Science (1995)	
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				Application Number	10/550,518	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT			CLOSURE	Filing Date	September 23, 2005	
			PLICANT	First Named Inventor	Martin F. BACHMANN	
	(Use as man)			Art Unit	1615	
				Examiner Name	To Be Assigned	
Sheet	8	of	11	Attorney Docket Number	1700.0630000/BJD/WBC	

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume number, publisher, city and/or country where published	T ²
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